

Work Order ID 129568

129568

Page 1

February-17-15 7:36:05 AM

Item ID: D3391-025 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Aft Tube Assembly
 Start Date: 2/17/15 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 2/27/15 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3391	I

100 0.00

100

Mori Seiki

Mori Seiki CNC Lathe Large

MORI SEIKI CNC LATHE LARGE

Memo

Turn as per Folio FA599

Rev: *[Signature]* D3391 Rev: *[Signature]*

ensure steady rest is turning true

****REMOVE STEADY REST AND MACHINIG MARKS****

SCRAP

[Handwritten: 1 0]

mmml
15/02/23

110 0.00

110

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

[Handwritten: 1 0]

mmml
15/02/24

February-17-15 7:36:05 AM

Item ID:	D3391-025	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:						
Item Name:	Aft Tube Assembly				Stop	*NS2*
Start Date:	2/17/15	Start Qty:	1.00	*1*	Cust Item ID:	
Required Date:	2/27/15	Req'd Qty:	1.00	*1*	Customer:	
Reference:						

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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112

QC5- Inspect part completeness to step on W/O

0.00

1 1 2

QC

Memo

0.00

Quality Control

120

0.00

120

HAAS 1

HAAS CNC VERTICAL MACHINING #1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per Folio FA 599 Rev: I & Dwg D3391 Rev: I
2-Debur

130

QC2- Inspect parts off machine FAI/FAIB

0.00

130

QC

Memo

0.00

Quality Control

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 Required Date: 2/27/15 Req'd Qty: 1.00 *1* Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC8- Inspect parts - second check	0.00				1	0		DAS 14 9-89
140									
QC	Memo	0.00							
Quality Control	***INSPECT INSIDE BORE***								15/03/16
150		0.00							
150	Skidtubes					1	0	15-3-16	JK
Skidtubes	Memo	0.00							
Skidtubes	1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803								
160		0.00							
160	BENDING MACHINE - SKIDTUBES					1	0	15-3-16	DBL
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Form as per Dwg D3391 Using Bend Prog 3391025								

4.215.

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Item ID: D3391-025 Accept *N900040100* Setup Start *NS1*

Revision ID:

Item Name: Aft Tube Assembly Stop *NS2*

Start Date: 2/17/15 Start Qty: 1.00 *1*

Required Date: 2/27/15 Req'd Qty: 1.00 *1*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC5- Inspect part completeness to step on W/O	0.00							
170									
QC	Memo	0.00							
Quality Control									

DAS 03 9-89

15-3-16

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February-17-15 7:36:05 AM

Item ID: D3391-025 Accept *N900040100* Setup Start *NS1*
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 Item Name: Aft Tube Assembly
 Start Date: 2/17/15 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 2/27/15 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

180	Skidtubes	0.00							
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180

Skidtubes

Skidtubes

Memo

0.00

1-Open Aft cap pilot hole to .208" as per Dwg D3391

2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only

3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217
 Wearplate Jig .

*****Do Not Open To Finished Size*****

4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2
 previously drilled aft wearplate holes.

5-Open wearplate holes to 0.297" and c'bore as per dwg D3391

6-Open up all float bag holes to 0.328" and c'sink as per Dwg D3391.

7-Deburr

8- Scribe batch # on fwd end

15-3-16 JH

DGC 15-3-17

DGC 15-3-17

DGC 15-3-17

15-3-16 JH

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February-17-15 7:36:05 AM

Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Tube Assembly
Start Date: 2/17/15 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/27/15 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.00							
Quality Control									
200	Chemical Conversion Coat per QSI005 4.1	0.00							
200									
HandFinish	Memo	0.00							
Hand Finishing									
210	QC7-Inspect Chemical Conversion Coat	0.00							
210									
QC	Memo	0.00							
Quality Control									

PTO
last page

February-17-15 7:36:05 AM

Item ID: D3391-025

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Aft Tube Assembly

Stop *NS2*

Start Date: 2/17/15 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 2/27/15 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID

Tool #**Plan
Code**

Accept Qty

Reject
Qty

Reject Number

**Insp.
Stamp**

220

0.00

220

Skidtubes

0.00

Skidtubes

Memo

1- Instal spacers as per dwg D3391
A/R Magnabond 6398 Batch: _____
exp. date : _____
cure time 12hrs as per QSI0015

2- Grind crossbolts flush

3- Back drill using #9 drill

4- Touchup Magnabond

5- Debuur

230

QC5- Inspect part completeness to step on W/O

0.00

230

QC

Memo

0.00

Quality Control

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February-17-15 7:36:05 AM

Item ID: D3391-025 Accept *N900040100* Setup Start *NS1*

Revision ID:

Item Name: Aft Tube Assembly Stop *NS2*

Start Date: 2/17/15 Start Qty: 1.00 *1*

Required Date: 2/27/15 Req'd Qty: 1.00 *1*

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
290	QC21- Final Inspection - Work Order Release	0.00							
290									
QC	Memo	0.00							
Quality Control									

Handwritten signature and date: 2/15-4-9

Picklist Print

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Work Order ID: 129568

129568

Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/17/15

Required Date: 2/27/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev B 06-02-07 ECN773 dwg rev. D EC
 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD
 IPP Rev:F 07-11-13 ECN 1056 DD verified by: EC
 IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC IPP Rev:H
 11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4095-047		Manufactured	No			260	Each	22.0000	1	1			

D4095-047

Wearpad Aft

Location	Loc Qty	Loc Code
FP001	22	
116100	20	
120523	2	

D4095-049	Manufactured	No			260	Each	48.0000	1	1				
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D4095-049

Wearpad Aft

Location	Loc Qty	Loc Code
FP001	48	
116084	12	
126331	36	

D6014-090	Manufactured	No			100	Each	48.0000	1	1				
-----------	--------------	----	--	--	-----	------	---------	---	---	--	--	--	--

D6014-090

ALUMINUM EXTRUSION

Location	Loc Qty	Loc Code
LG003	48	
79742	13	
86063	35	

1 mm L 15/02/20

Picklist Print

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Work Order ID: 129568

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/17/15

Required Date: 2/27/15

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured No

230

Each

64.0000

4

4

D3670-4-200

Bushing

Location

Loc Qty

Loc Code

FG

10

87709

10

LG001

54

109108

54

D2646

Manufactured No

270

Each

76.0000

1

1

D2646

Aft Cap

Location

Loc Qty

Loc Code

FG

4

85848

2

90495

2

FP001

72

103306

1

114495

6

127924

24

128761

41

D3672-1

Manufactured No

270

Each

978.0000

2

2

D3672-1

Washer, Phenolic

Location

Loc Qty

Loc Code

FG

10

85222

10

FP001

280

113581

280

ST055

688

120116

188

127322

500

Picklist Print

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Work Order ID: 129568

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/17/15

Required Date: 2/27/15

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

AELS4-1032-130 Purchased

No

260

Each

2,824.000

14

14

AI S4-1032-130

Rivnut

Location

Loc Qty

Loc Code

CA

1617

M128649

1617

FP001

148

M128649

148

st549

1059

117717

10

M128649

1049

ALS4-1032-225

AELS8-1032-225 Purchased

No

270

Each

163.0000

8

8

AI S4-1032-225

Rivnut

Location

Loc Qty

Loc Code

FG

120

M127028

120

FP001

43

M131067

43

AN3C4A

Purchased

No

270

Each

1,554.000

6

6

AN3C4A

Bolt

Location

Loc Qty

Loc Code

FG

20

122814

20

ST338a

1400

M131320

400

M131420

1000

ST350

134

M130716

134

Picklist Print

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Work Order ID: 129568

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/17/15

Required Date: 2/27/15

Start Qty: 1.00

Required Qty: 1.00

AN3C5A	Purchased	No	270	Each	1,089.000	4	4
--------	-----------	----	-----	------	-----------	---	---

AN3C5A

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	5	
122800	5	
ST338a	662	
M130770	146	
M130851	16	
M131320	500	
ST350	422	
M131420	422	

NAS1149C0332R	Purchased	No	270	Each	3,891.000	10	10
---------------	-----------	----	-----	------	-----------	----	----

NAS1149C0332R

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	2140	
m130325	2140	
GA	2	
125654	2	
ST271	1749	
125654	44	
m130466	15	
m131340	1690	

DART AEROSPACE LTD		Work Order: 179568
Description: Float Skidtube (412)		Part Number: D3391-3
Inspection Dwg: D3391	Rev: I	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

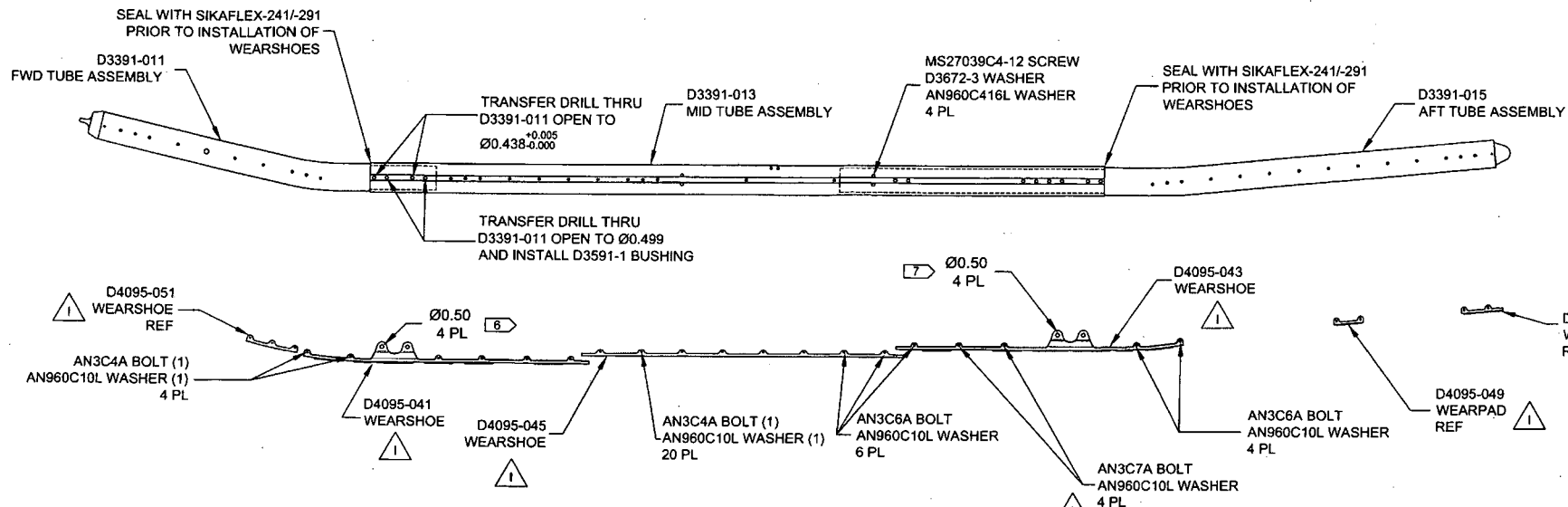
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.000	✓		tape	LG-11
3.500	+/-0.010	3.500	✓		vern	CNC-08
Ø3.200	+/-0.010	3.201	✓			
Ø3.750	+/-0.010	3.750	✓			
30° x 0.060 chamfer	+/-0.010	30° x 0.060	✓			
88.93	+/-0.030	88.925	✓		tape	LG-11

Measured by: MML	Date: 15/02/23
Audited by: 9.88	Date: 15.02.25

HAAS Section						
1.526	+0.000/-0.030	1.517	✓		Vern	CNC-02
7.500	+/-0.010	7.498	✓		"	"
27.750	+/-0.010	27.750	✓		Tape	FK-05
31.750	+/-0.010	31.750	✓		"	"
35.250	+/-0.010	35.250	✓		"	"
3.300	+/-0.010	3.306	✓		Vern	CNC-02
0.200	+/-0.010	0.201	✓		"	"
3.520	+/-0.010	3.521	✓		"	"
0.687	+0.010/-0.000	0.688	✓		"	"
R0.062	+/-0.010	0.062	✓		R-G	
Ø0.484	+0.005/-0.001	0.486	✓		Vern	FK-04

Measured by: 44 9.89	Date: 15/03/15
Audited by: DAS	Date: 15/03/14

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
H	11.06.21	Dimension 44.995 removed	KJ	
I	12.05.15	Dwg Rev updated	KJ	
J	12.05.23	Dimension updated	KJ	
K	12.10.15	88.93 dimension removed	KJ	
L	12.11.28	88.93 dimension added	KJ	



D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
4	D3672-3	WASHER
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARSHOE
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL 0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 6) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL 0.50 HOLES FROM SADDLE TO D4095-041
- 7) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL 0.50 HOLES FROM SADDLE TO D4095-043

RELEASED
2011-11-04
ECN# H-662

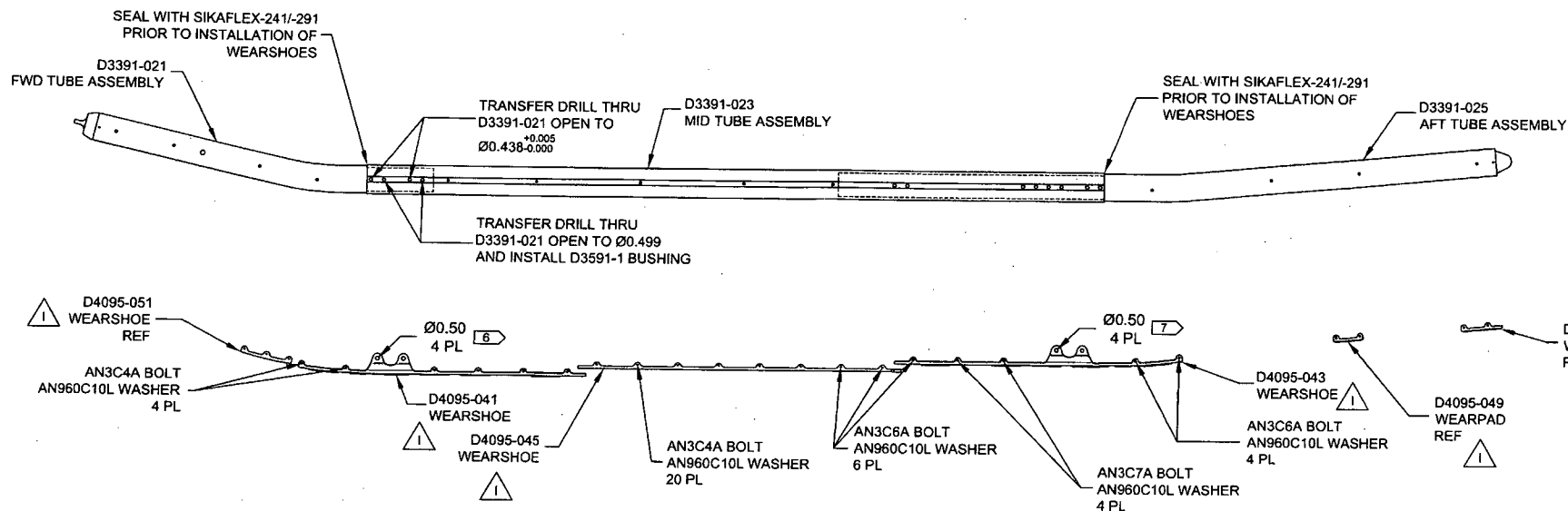
I	REMOVE GASKETS AND REPLACE ALL WEARSHOES; PARTS LIST UPDATE, ZN A8-1, ZN A8-2, ZN A6-4, ZN B6-8; LPS-3 COATING REMOVED FROM NOTE 2, ZN A3-1, ZN A3-2, REMOVED INSERT AELS-1032-130, ZN B6-4, B2-4, C7-8, C3-8; REMOVED HOLES, ZN D6-4 ZN D2-4, ZN D7-8, ZN D3-8	XDF	11.10.13
H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING, ZN C6 0.438 DIM WAS 4 PL. ADDED 0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING, ZN C6 0.438 DIM WAS 4 PL. ADDED 0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	XDF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.10.13		

DART AEROSPACE USA, INC
KENT, WA

DRAWING NO. D3391
REV. 1
SHEET 1 OF 8

TITLE 412 FLOAT SKIDTUBE
SCALE NTS

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D3391-043 ASSEMBLY

D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

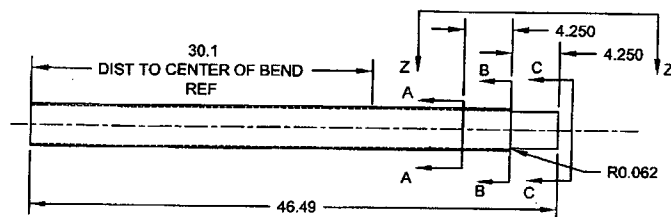
QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARPAD
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER

GENERAL NOTES

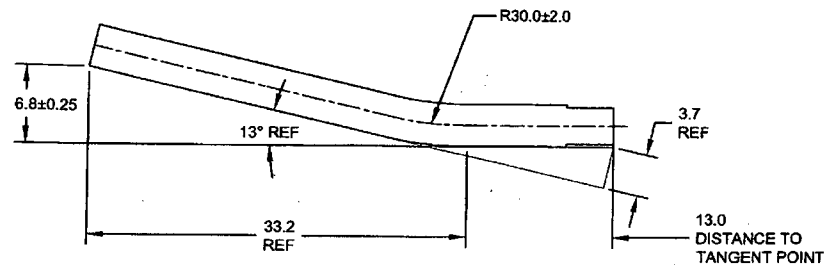
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"
- 3) AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 7) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

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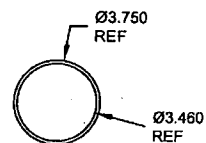
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV.
MFG. APPR.		D3391	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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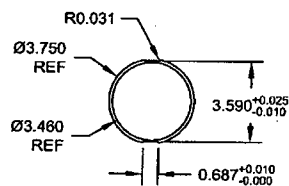
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



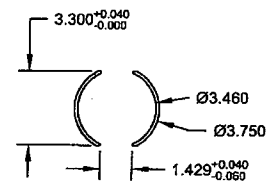
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



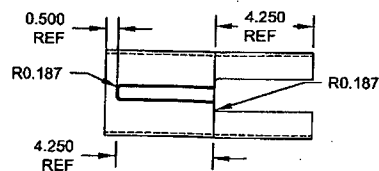
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



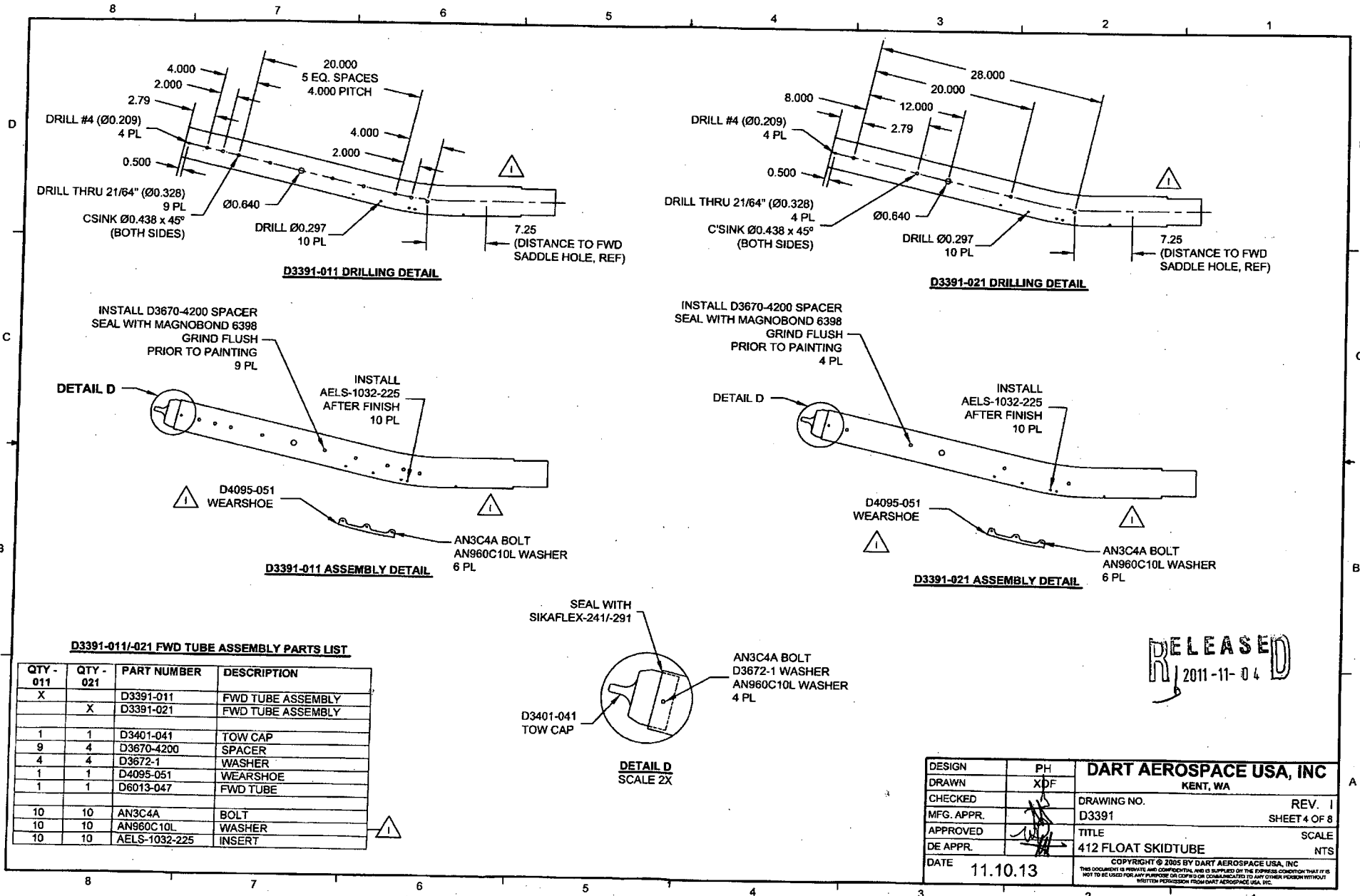
SECTION C-C
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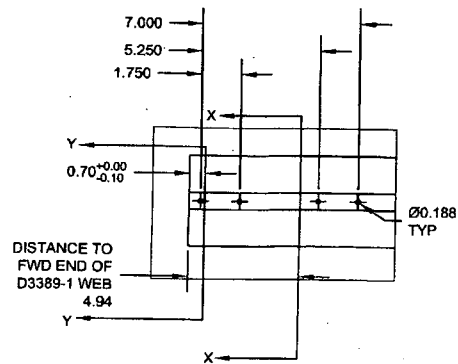


VIEW Z-Z
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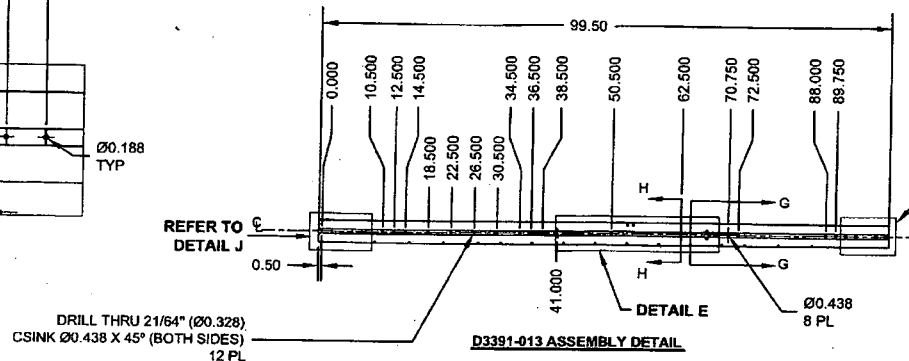
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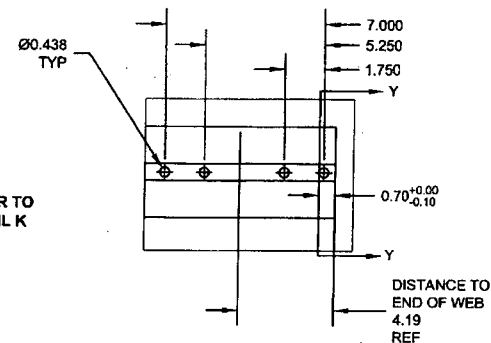




DETAIL J
SCALE 4X



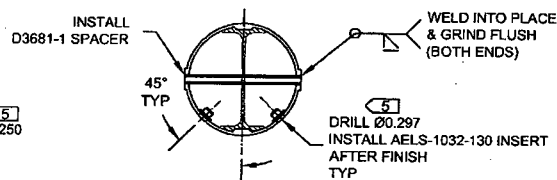
D3391-013 ASSEMBLY DETAIL
SCALE 5X



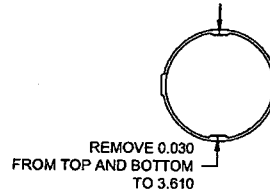
DETAIL K
SCALE 4X



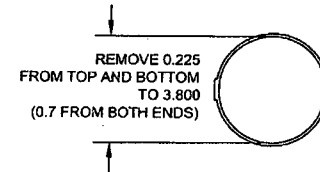
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



SECTION X-X
SCALE 5X



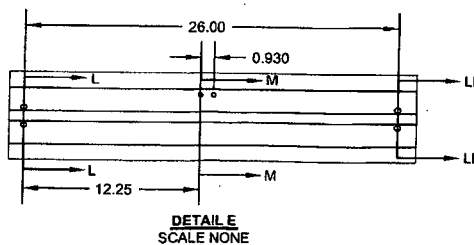
SECTION Y-Y
SCALE 5X

D3391-013 MID TUBE ASSEMBLY PARTS LIST

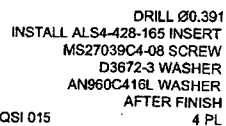
QTY	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

D3391-013 MID TUBE ASSEMBLY

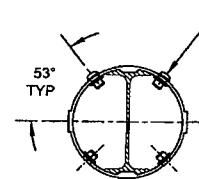
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART.QSI 004



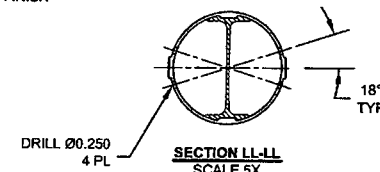
DETAIL E
SCALE NONE



SECTION L-L
SCALE 5X



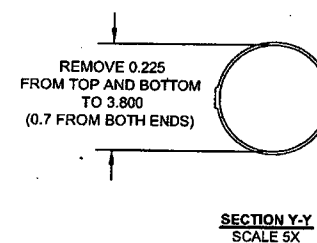
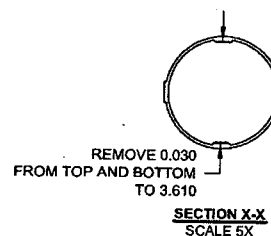
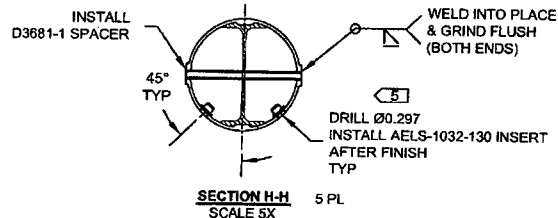
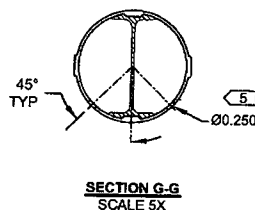
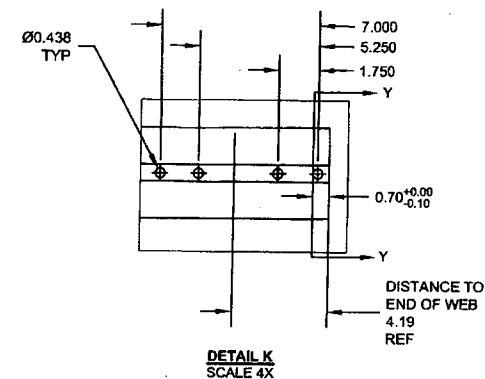
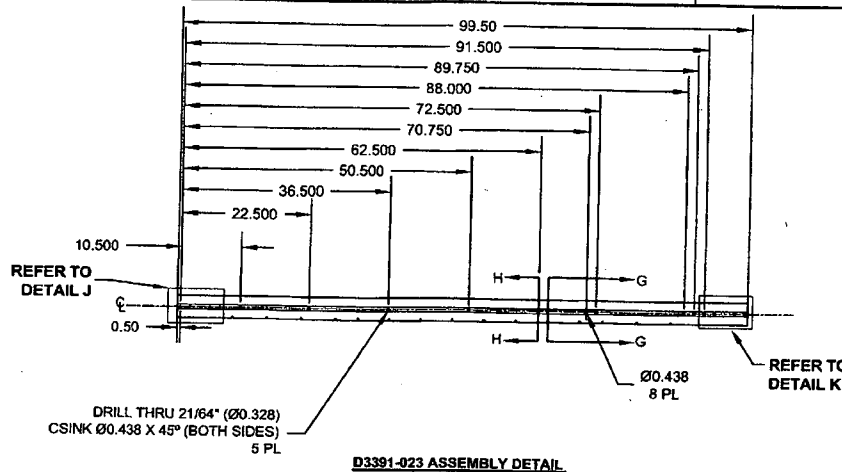
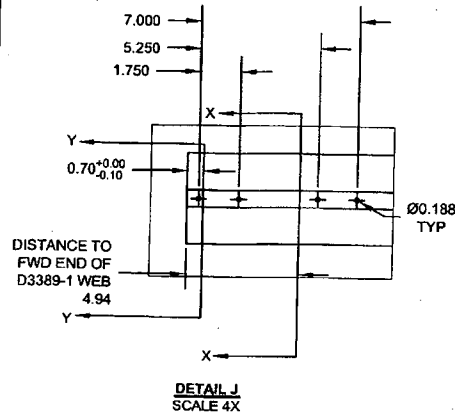
SECTION M-M
SCALE 5X



SECTION LL-LL
SCALE 5X

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MFG. APPR.		D3391	SHEET 5 OF 8
APPROVED		TITLE	SCALE
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D3391-023 MID TUBE ASSEMBLY PARTS LIST

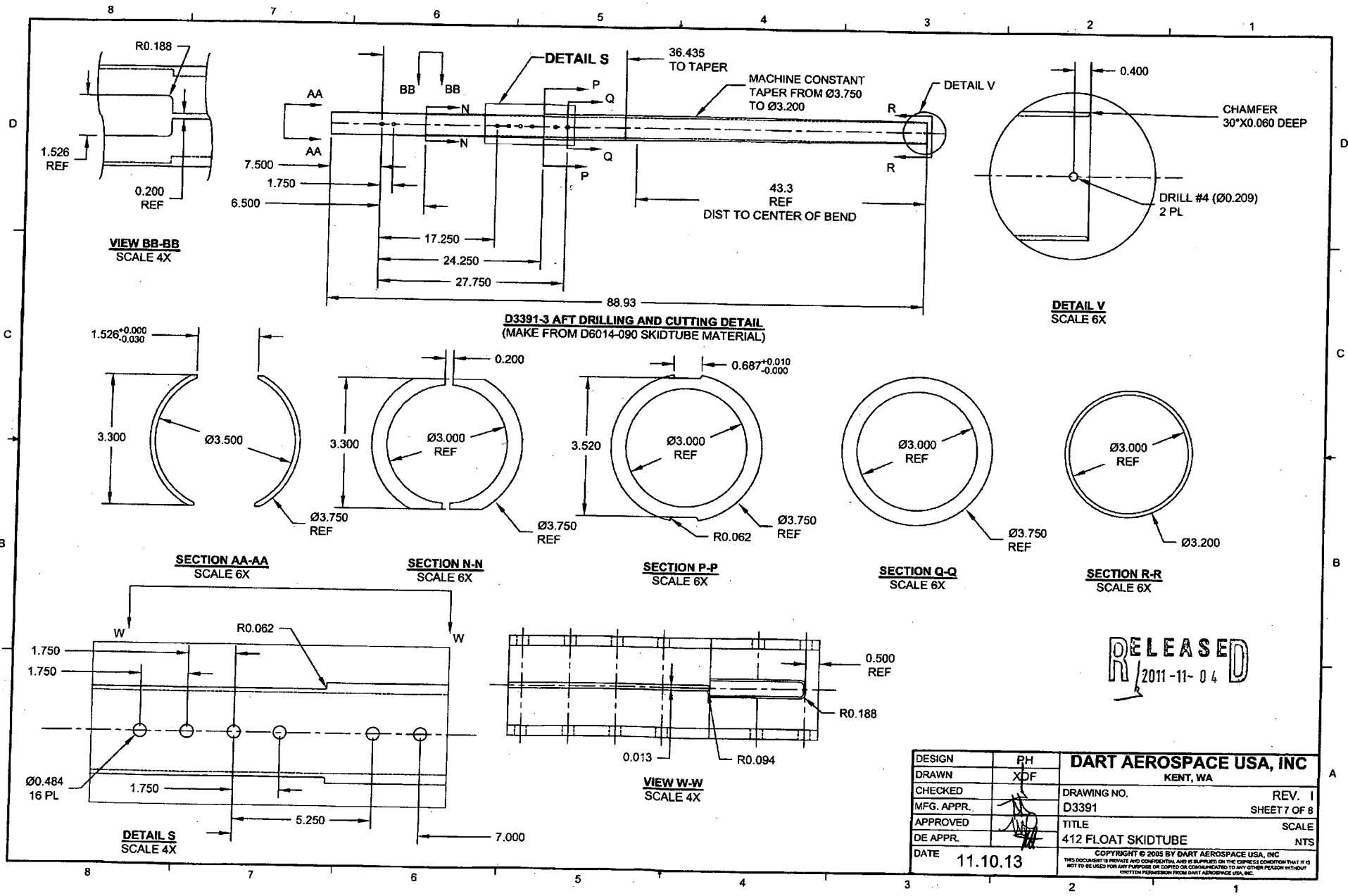
QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

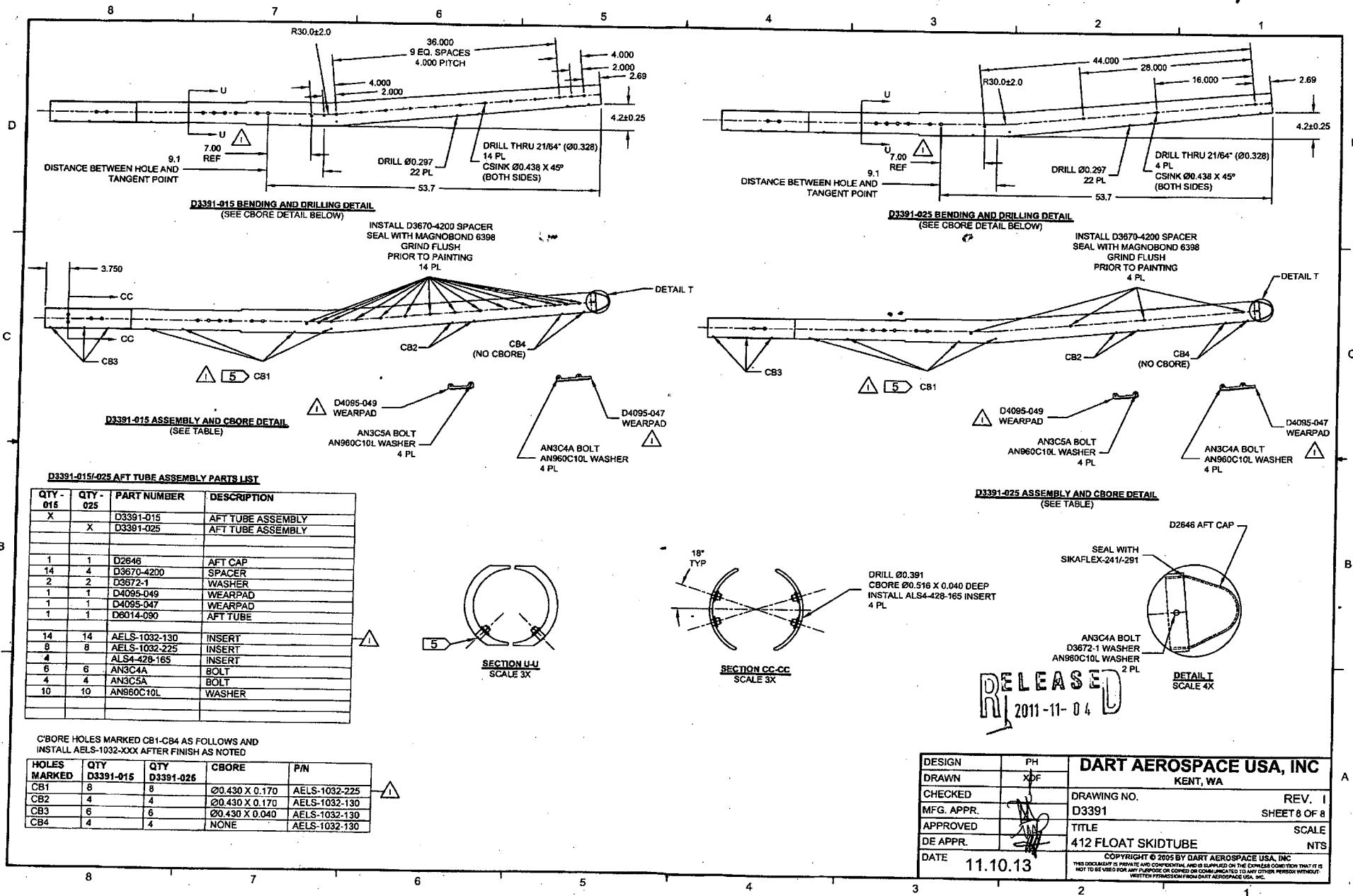
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>129568</u> Part No. <u>D3391-025</u> NCR No. _____	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☒ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐ Doc/Data ☐ Equip/Tooling ☒ Handling/Pre ☐ Material ☐ Operator ☒ Offset/Setup ☐ Process ☒ Supplier ☐ Training ☐ Transport ☐ Unapproved ☐	15-317	180	1	All wearplate holes drilled at wrong angle. Section CB1, CB2, CB3 RC: Operator / Tooling PA: New Tooling being made.	 4/2/2015	Scrap & destroy 15/4/8 \$ 1172.00	 15-4-8	 15-4-8	PD 15.04.08

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☒ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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